



Montana Department of  
**ENVIRONMENTAL QUALITY**

Brian Schweitzer, Governor

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**TO:** Environmental Quality Council  
**FROM:** George Mathieus, DEQ  
**SUBJECT:** Clarification regarding July Nutrient Work Group presentation  
**DATE:** September 7, 2010

This memo is to provide clarification on some questions derived from the Nutrient Work Group discussion on July 22, 2010.

*Point 1: There was considerable question and discussion related to the Department's ability to deal with natural conditions such as floods, subsequent high flows, drought and other natural conditions.*

- As I indicated in testimony, the Department manages natural conditions on a regular basis. A key point is that 75-5-306 MCA, already addresses this issue, and does not allow the Department to require treatment purer than a natural condition.

*Point 2: Questions and discussion surrounding my "leading the nation" comment warrant some statistics.*

- As of November 24, 2009, 46 of 50 states have submitted plans to EPA for the development of numeric nutrient criteria.
- Currently, 25 States have some form of numeric nutrient criteria on the books, including Montana. (ARM 16.30.631)
- To the best of the Department's knowledge, one state (Florida) has been successfully sued over lack of criteria development. EPA promulgated nutrient criteria for Florida as a result. Two other states (Kansas, Wisconsin) have each received a Notice of Intent to sue over the lack of progress in adopting numeric nutrient criteria. Additionally, activists have petitioned EPA to take action on other states in the Mississippi River basin, including Ohio, Illinois, and Iowa.
- While Montana is clearly NOT leading the nation in numeric nutrient criteria development per se, we are proud to be the leaders in developing a transparent process whereby stakeholder involvement is key to successful implementation of our standards. The Department is committed to ensuring the adoption of numeric criteria will only occur when the development of the implementation component is complete. While other states have developed criteria in the absence of a publicly reviewed implementation process, the Department will continue to move forward with our current transparent process to tie sensible implementation to adoption of the numbers.

More detailed information can be found at the following websites:

<http://epa.gov/waterscience/criteria/nutrient/strategy/status.html>

<http://deq.mt.gov/wqinfo/NutrientWorkGroup/default.mcpix>

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Point 3: Will Montana have stricter standards than other states, such as New Jersey for example.

- In the nation, in our watershed, the corn belt of Iowa, Nebraska, etc has very high nutrient loads and is a big contributor to Gulf Hypoxia. In Montana, synoptic probabilistic stream sampling showed that about 15-20% of streams samples exceed our proposed ecoregionally-based criteria. Since natural loading has been taken into account in the development of the criteria, this indicates that about 80% of our streams have natural levels of nutrients and about 20% have levels elevated above natural, due to human causes.
- The Department continues to work with other states across the nation as we develop numeric nutrient criteria. The table below shows some comparisons of where Montana's draft numbers line up with other states and counties.

Montana draft nutrient criteria compared to recent criteria used in or being considered by other states, countries.

State or Country	Forested Mountainous Regions		Plains Agricultural Regions	
	Total Phosphorus (mg/L)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Total Nitrogen (mg/L)
<b>Montana<sup>a</sup></b>	<b>0.03</b>	<b>0.30</b>	<b>0.10 to 0.20</b>	<b>1.12</b>
<b>Vermont<sup>b</sup></b>	0.01 to 0.03	0.3 to 0.5		
<b>Colorado<sup>c</sup></b>	0.09	0.8	0.14	1.32
<b>Ohio<sup>d</sup></b>			0.04 to 0.10	
<b>Maine<sup>e</sup></b>	0.01 to 0.03			
<b>Calgary, Alberta, Canada<sup>f</sup></b>	0.014			
<b>New Zealand<sup>g</sup></b>	0.026	0.295		
<b>Australia<sup>h</sup></b>	0.02	0.25		

<sup>a</sup> Typical regional criteria as they will appear in upcoming addendum to Suplee *et al.* (2008).

<sup>b</sup> Presented at 7th National Monitoring Conference, Denver, CO, April 2010.

Available at [http://acwi.gov/monitoring/conference/2010/B3/B3\\_Kamman.pdf](http://acwi.gov/monitoring/conference/2010/B3/B3_Kamman.pdf)

<sup>c</sup> As presented to Colorado Water Quality Control Division, February 9, 2010.

<sup>d</sup> Ohio Environmental Protection Agency, OWEA Government Affairs Workshop, March 2010.

<sup>e</sup> Presented at National Nutrient Criteria All-states Meeting, Dallas, TX, February 2006.

<sup>f</sup> Bow River Basin Watershed Water Quality Objective and Indicators, March 2008. Prepared by the

Bow Basin Watershed Management Plan Technical Committee for the Steering Committee.

<sup>g,h</sup> ANZECC & ARMCANZ Guidance, 2000. Available at

<http://www.mfe.govt.nz/publications/water/anzecc-water-quality-guide-02/anzecc-water-quality-guide-02-pdfs.html>

- Finally, the Department's draft criteria are protective for the designated beneficial uses of the state and tailor-made for the ecoregions within the state. However, if EPA were to set criteria for Montana today, their numbers could be conservative and subsequently more stringent than Montana's draft criteria. This is partially due to setting standards at the national, or regional level versus state level.